

Abstract

Title: Functional disorders in the foot by members of the Honor Guard of the Army of the Czech Republic

Objectives: The thesis deals with the activities of soldiers Honor Guard and leg problems arising therefrom. The intention of the theoretical part is generally characterize the activity Honor Guard units, anatomical structure and kinesiology feet, including functional and structural pathology. The aim of the study was to analyze how subjective Musculoskeletal problems are most commonly found among soldiers and assess the impact of the standard used by prestige and sports shoes on his feet when the functional aspects of the activities simulating workloads soldiers.

Methods: To obtain basic data on individual participants in research is used surveys using non-standardized anamnesis questionnaire. The main research method to develop practical part of the thesis was to strain gauge device (measuring system) Pedar-X detection and evaluation of plantar pressure, force, contact area and contact time. For processing and evaluation of the data obtained was used program Pedar-X Standard version 3.19.30. Physiotherapist laboratory CASRI was carried out by soldiers basic clinical examination.

Results: The research involved 10 soldiers Honor Guard. The research sample included soldiers from 24 to 41 years old. With an average weight of 84.5 kg and an average height of 183.3 cm. Six of them subjectively complains of foot pain and lumbar spine. Physiotherapist found in all tested Soldiers on both sides transverse arch reduced and increased tension toes and flexor m. Abductor hallucis and 8 soldiers were also reported increased tension extensors fingers. In the studied group of soldiers were measured using a strain gauge device Pedar-X distinct differences in load legs in different situations. With a total maximum surface feet highs variable reaches while walking in the shoe Adidas. Conversely, the highest readings total maximum force and pressure are representative of shoes in the process.

Keywords: Honor guard, arch, foot deformities, foot, footwear, flat feet.